

STATE OF LOUISIANA

DEPARTMENT OF ENVIRONMENTAL QUALITY

IN THE MATTER OF

WESTLAKE PETROCHEMICALS LP
WPT LP, WESTLAKE POLYMERS LP
AND WESTLAKE STYRENE LP

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ENFORCEMENT TRACKING
NUMBERS AE-CN-00-0154;
AE-CN-00-0154A;
AE-PP-00-0375; WE-CN-02-0248;
AE-PP-01-0065

PROCEEDINGS UNDER THE LOUISIANA
ENVIRONMENTAL QUALITY ACT,
La. R.S. 30:2001, ET SEQ.

SETTLEMENT AGREEMENT

The following SETTLEMENT AGREEMENT ("Settlement Agreement") is entered into between Westlake Petrochemicals, L.P., WPT, L.P., Westlake Polymers L.P., and Westlake Styrene, L.P. (hereinafter collectively referred to as "Respondent") and the Louisiana Department of Environmental Quality ("the Department") under the authority granted by the Louisiana Environmental Quality Act ("the Act"), La. R.S. 30:2001, et seq., and particularly by La. R.S. 30:2025(E) and La. R.S. 30:2050.3.

I.

The Respondent owns and operates facilities for the manufacture of ethylene, styrene monomer, and polyethylene located in Calcasieu Parish, Louisiana.

II.

The Department issued to Respondent the following enforcement actions: AE-CN-00-0154 on or about November 2, 2000; AE-CN-00-0154A on or about October 16, 2001; AE-PP-00-0375 on or about December 1, 2000; WE-CN-02-0248 on or about October 17, 2002 and AE-PP-01-0065 on or about April 10, 2001. All of these enforcement actions are incorporated herein and made a part of this Settlement Agreement as Attachment 1. These enforcement actions alleged various violations of the following non-exclusive laws and/or regulations 40 CFR Part 61, Subpart FF, National Emission Standard for Hazardous Air Pollutants Benzene Waste Operations (“NESHAP”); LAC 33: III, Chapters 5, 21, and 51; LAC 33: IX, Chapters 1, 3, 5, 9, and 23; and the Act. In these enforcement actions, the Department notified respondent that the issuance of a penalty assessment was being considered for the violations alleged therein.

Respondent also reported various noncompliances by the notice letter dated February 14, 2003.

III.

Representatives of the Respondent and the Department met on various occasions to discuss mitigating factors and circumstances surrounding the alleged violations. Respondent submitted written comments to the Department concerning (a) the enforcement actions; (b) certain mitigating factors concerning the alleged violations; and (c) the penalty factors under La. R.S. 30:2025(E)(3) and LAC 33:I. Chapter 7.

IV.

Respondent denies it committed any violations or that it is liable for any fines, forfeitures and/or penalties.

V.

Nonetheless, the Respondent, without making any admission of liability under state or federal statute or regulation, agrees to pay, and the Department agrees to accept, a payment in the amount of Eight-Hundred Fifteen Thousand and 00/100 (\$815,000.00) Dollars, of which Fourteen Thousand and Forty-One and 93/100 (\$14,041.93) Dollars represents the Department's enforcement costs, in full and complete settlement of all of the alleged noncompliances referred to in this Settlement Agreement. The total amount of money expended by Respondent on cash payment(s) to the Department as described above shall be considered a civil penalty for tax purposes, as required by La.R.S. 30:2050.7(E)(1).

VI.

Respondent has submitted to the Department applications to modify existing Title V Permits or to revise pending Title V permit applications for the entire facility. Respondent shall comply with the interim emissions limitations or the permits ultimately issued by the Department, as provided for in Paragraph VIII(B) of this Settlement Agreement.

VII.

Respondent, in addition to the penalty amount specified in Paragraph V above and as part of this Settlement, agrees to the following:

- A. To expend the amount of Four Million Four-Hundred Eight Thousand and 00/100 (\$4,408,000.00) Dollars to implement and/or perform the Beneficial Environmental Projects (BEPs) identified, and according to the schedule set forth, in Attachment 2, which is attached hereto and incorporated in this Settlement Agreement.
- B. Respondent shall submit monthly reports regarding its progress on the projects. The first shall be due on the 5th of the month following the date the Department signs this

Settlement Agreement. Monthly reports shall be submitted on the 5th of every month thereafter until the project is completed. Each such monthly report shall include a description of the project, tasks completed, tasks remaining, the percentage completed, and money expended on each project through the date of the report. Upon completion of all projects required under this Settlement Agreement, Respondent shall submit a final report to include a summary of all the information previously submitted and a total amount spent on the projects listed in Attachment 2. It shall also contain a certification that the projects were completed as described.

- C. If Respondent does not spend the amount of Four Million Four-Hundred Eight Thousand and 00/100 (\$4,408,000.00) Dollars on these enumerated BEPs, then it shall, in its final report, propose additional projects for the Department's approval, or pay to the Department in cash, an amount equal to the difference between the amount of money agreed to be spent and the amount of money actually spent.
- D. The total amount of money expended by Respondent on cash payments to the Department and on BEPs, as described above and in Attachment 2, shall be considered a civil penalty for tax purposes, as required by LA.R.S.30:2050.7(E)(1).

VIII.

In addition to the items set forth in Paragraphs V, VI and VII, Respondent shall take the following actions:

- A) Respondent shall perform the action items listed in Attachment 3, attached hereto and made a part of this Settlement Agreement, by the dates indicated therein;
- B) Respondent has submitted to the Department permit applications to renew existing Title V permits and has submitted new applications or revisions to pending Title V permit

applications to address the issues raised in this Settlement Agreement. These Title V permit applications are identified in Attachment 4 to this Settlement Agreement. The emission limits requested in the submissions identified in Attachment 4 are intended to reconcile permit limits with actual emissions based on current knowledge of existing operations. Respondent shall, until a final decision by the Department on the pending Title V applications, comply with the interim limits set forth in Attachment 5 hereto; provided, however, as the decisions or orders of the Department addressing each application become final, pursuant to La. R.S. 30:2024, Respondent shall comply with the applicable limitations established in the permit or modified permit. Attachments 4 and 5 are attached hereto and made a part of this Settlement Agreement.

IX.

The Respondent agrees that the Department may consider the inspection reports, the compliance orders listed herein and supporting documentation on which they are based and this Settlement Agreement for the purpose of determining Respondent's compliance history in connection with any future enforcement or permitting action by the Department and, in any such future enforcement or permitting action, the Respondent shall be estopped from objecting to the above-referenced documents being considered as proving the violations alleged therein for the sole purpose of determining the Respondent's compliance history.

X.

This Settlement Agreement shall be considered a final order of the secretary for all purposes, including, but not limited to, enforcement under La. R.S. 30:2025(G)(2), and Respondent hereby waives any right to administrative or judicial review of the terms of this Settlement Agreement. Respondent expressly reserves, however, the right to administrative or

judicial review of the actions of the Department's acting upon, interpreting and/or applying the terms of this Settlement Agreement.

XI.

This Settlement Agreement is being made in the interest of settling the Department's claims and avoiding for both parties the expense and effort involved in litigation or an adjudicatory hearing. In agreeing to this compromise and settlement, the Department considered the factors for issuing and settling civil penalties set forth in La. R.S. 30:2025(E) of the Act and the rules relating to beneficial environmental projects set forth in LAC 33:I.Chapter 25.

XII.

The Respondent has caused a public notice advertisement to be placed in a newspaper of general circulation in Calcasieu Parish. The advertisement, in form, wording, and size, was approved by the Department and announced the availability of this Settlement Agreement for public view and comment. The Respondent has submitted a proof-of-publication affidavit to the Department, and as of the date this Settlement Agreement is executed on behalf of the Department, more than forty-five (45) days have elapsed since publication of the notice. Any comments received by the Department have been considered prior to the execution of this Settlement Agreement.

XIII.

This Settlement Agreement shall be effective upon execution by all parties hereto ("Effective Date"). The payment described in Paragraph V is to be made within ninety (90) days from Respondent's receipt of notice in writing of the Secretary's signature, which notice shall be provided in writing. If: 1) payment is not received within the specified time period, or 2) if the BEPs identified in Attachment 2 are not performed in accordance with the schedule set forth in

Attachment 2, or 3) the action items set forth in Attachment 3 are not performed in accordance with the schedule set forth in Attachment 3, the Department reserves the right to seek penalties against the Respondent for the Respondent's failure to comply with these requirements of this Settlement Agreement. Interest on any amount not timely paid accrues at the rate of 1 and 1/2% per month. Payments are to be made payable to the Department of Environmental Quality and mailed to the attention of Darryl Serio, Office of Management and Finance, Financial Services Division, Department of Environmental Quality, Post Office Box 4303, Baton Rouge, Louisiana, 70821-4303.

XIV.

In consideration of the above, the Department's claims for fines and penalties are hereby compromised and settled in accordance with the terms of this Settlement Agreement.

XV.

The provision of this Settlement Agreement shall apply to and be binding upon the State of Louisiana and upon the Respondent and the officers, agents, servants, employees, successors, and assigns of both parties.

XVI.

Each undersigned representative of a party certifies that such representative is fully authorized to enter into the terms and conditions of this Settlement Agreement to legally execute and legally bind such party to this document.

WITNESSES:

[Signature]

Sam R. Gwillard

RESPONDENT

BY: [Signature]
(Signature)

Lloyd Stone
(Printed)

TITLE: Corporate HSE Manager

THUS DONE AND SIGNED in duplicate original before me this 16th day of
July, 20 03, in Baton Rouge.

[Signature]
NOTARY PUBLIC

WITNESSES:

Holly Smith

[Signature]

STATE OF LOUISIANA
Hall Bohlinger, Secretary
Department of Environmental Quality

BY: R. Bruce Hammatt
R. Bruce Hammatt, Assistant Secretary
Office of Environmental Compliance

THUS DONE AND SIGNED in duplicate original before me this 31st day of
October, 20 03, in Baton Rouge, Louisiana.

[Signature]
NOTARY PUBLIC

Approved: R. Bruce Hammatt
R. Bruce Hammatt, Assistant Secretary

STATE OF LOUISIANA

DEPARTMENT OF ENVIRONMENTAL QUALITY

IN THE MATTER OF:

WESTLAKE PETROCHEMICALS, LP, et al.
CALCASIEU PARISH

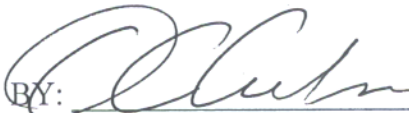
ENFORCEMENT TRACKING NOS.
AE-CN-00-0154; AE-CN-00-0154A;
AE-PP-00-0375; AE-CN-02-0248;
AE-PP-01-0065

PROCEEDINGS UNDER THE LOUISIANA
ENVIRONMENTAL QUALITY ACT, La. R.S.
30:2001, ET SEQ.

This Settlement Agreement has been reviewed, and is concurred in, by the Attorney General,
under the provisions of La. R.S. 30:2050.7.

RICHARD P. IEYOUB
ATTORNEY GENERAL

DATED: 10-24-05

BY: 

ASSISTANT ATTORNEY GENERAL

ATTACHMENT 2 - BENEFICIAL ENVIRONMENTAL PROJECTS

July 11, 2003

No.	Project Description	Compliance Date	Amount \$	Detailed Description and Environmental Benefit
1	Donation of \$3,500 to the local fire department to share in the purchase of approximately 3000 smoke alarms to be distributed to local citizens.	04/30/02	\$3,500	This project provides assistance to emergency response activities and will directly impact approximately 3,000 people.
2	Donation of \$140,000 for the purchase of one pumper truck for the local fire department.	12 mos. After Effective Date Of SA	\$140,000	This emergency planning, preparedness and response project will provide assistance to a local emergency response agency by further enabling the agency to respond to emergency conditions which might arise from the release of hazardous substances.
3	Purchase of Two Thermal Imagers for the local fire department.	12 mos. After Effective Date Of SA	\$36,000	A thermal imager will help the fire department identify if a person would be trapped inside a home or building. Thermal imagers are designed to pick-up heat sources. This emergency planning, preparedness and response project will provided assistance to a local emergency response agency by further enabling the agency to respond to emergency conditions which might arise by the release of hazardous substances.
4	Purchase of Four Self-Contained Breathing Apparatus for the local fire department.	6 mos. After Effective Date Of SA	\$14,000	This emergency planning, preparedness and response project will provide assistance to a local emergency response agency by further enabling the agency to respond to emergency conditions which might arise by the release of hazardous substances.
5	Beneficial Re-use of Cracking Tars – This is a Petro 2 Project to install a tar handling system to manage tars.	07/31/03	\$600,000	This project will result in recycling a material currently being disposed as a hazardous waste. This will reduce hazardous waste disposal by approximately 300 TPY. By reducing handling of hazardous waste drums, the project will also reduce HAPS emissions by about 0.1 TPY. This pollution reduction project which recycles this material will result in a reduction in hazardous wastes entering TSDF facilities.
6	Connection of Zimpro Vent to Thermal Oxidizer – Petro 1 Project to tie the Zimpro vent into the Thermal Oxidizer for the FF Project.	06/30/03	\$100,000	This project will connect the Zimpro Vent that currently has no add-on air pollution controls in place to the thermal oxidizer. This project will decrease the amount of hazardous substances entering the environment by reducing TAPS emissions by about 0.6 TPY and reducing VOC emissions by about 8 TPY. The installation of the end-of-process equipment to control these emissions constitutes pollution reduction.
7	Install controls for Py Oil Loading – Petro 1 Project.	02/28/03	\$75,000	This pollution reduction project will add controls to the py-oil loading operation. The addition of this end-of-process control equipment will reduce TAPS emissions by about 0.8 TPY and reduce VOC emissions by about 1.0 TPY.
8	Petro 1 FF Retrofit Project—A new sewer system which segregates process wastewater from stormwater and an above ground collection system will be installed– This upgrade to the FF Project is designed to move benzene laden streams through an above ground hard piped collection system from various points via individual collection headers to collection drums, rather than utilizing the existing underground sewer system. These modifications exceed the minimum standards	07/31/02	\$2,410,000	This upgrade to the FF Project is designed to minimize potential impacts on groundwater and to minimize the quantity of wastewater feed to the stripper, by creating a new above ground header system to transport the benzene laden streams. The new above ground system consists of approximately 300 individual points that are hard piped to a collection header. The header is directed to collection drums, all of which are sealed and controlled. The upgraded system further reduces emissions of TAPs by segregating and collecting stormwater, potentially containing benzene, in a sealed system. The project was designed to collect all potentially contaminated streams into sealed controlled systems. Alternate control options do not require all streams to be controlled. By including all potential streams, the project will result in lower TAPS emissions. These modifications exceed regulatory requirements since the existing underground collection

ATTACHMENT 2 - BENEFICIAL ENVIRONMENTAL PROJECTS

July 11, 2003

No.	Project Description	Compliance Date	Amount \$	Detailed Description and Environmental Benefit
	required for FF compliance.			system could have been enclosed and since all potentially contaminated streams will be collected in a controlled system.
9	Petro 1 FF Retrofit Project— – Selection of more efficient control device; a thermal oxidizer will be installed rather than a ground flare. Westlake will also install an enhanced vapor collection system, using nitrogen pads, detonation arrestors, and vacuum conservation vents vs. a simple vapor collection system. These modifications to the FF Retrofit Project exceed the minimum standards required for FF compliance.	07/31/02	\$230,000	<p>The use of a thermal oxidizer vs. a simple flare will result in a higher destruction efficiency for TAPS (thus lower TAPS emissions) and reduction in NOx and CO emissions from the control device. Based on the expected higher efficiency of the thermal oxidizer, this could represent about a 1.8 TPY reduction in TAPS. The project was also designed to minimize loading to the thermal oxidizer and prevent safety incidents with the enhanced vapor collection system.</p> <p>The vapor collection system will operate with nitrogen blankets on the tanks/vessels. This will result in reduced load to the control device, as vapors will be released only when the pressure exceeds the appropriate set point. A less sophisticated vapor collection system would have a constant flow to the control device, by putting a nitrogen purge on top of the tanks/vesells. These modifications to the Petro 1 FF Retrofit Project exceed regulatory standards by further reducing benzene emissions.</p> <p>The facility will be controlling and treating more streams to have a lower benzene quantity and reduced emissions, above the minimum required for FF compliance. This more effective end-of-process control technology will result in pollution reduction by decreasing the amount of hazardous substances entering the environment.</p>
10	Petro 1 FF Retrofit Project – Inclusion of an oily sludge storage system vs. continued use of frac tanks. This modification to the FF Retrofit Project exceeds minimum standards required for FF compliance.	07/31/02	\$300,000	Storage of oily sludge could continue with the use of frac tanks, authorized by the LDEQ with incorporation into the permit. Instead of continued use of frac tanks, the project will include an oily sludge storage tank to reduce the need for frac tanks. The use of the oily sludge tank will result in lower TAPS emissions due to the improved containment of the oily sludge tank and the thermal oxidizer controls for the oily sludge storage tank. This project reduces pollution by decreasing the amount of hazardous substances entering the environment.
11	Petro 1 FF Retrofit Project – Design of 400 gpm Wastewater Treatment System, including a steam stripper vs. a lower design flow rate system or reliance on the Petro 2 wastewater treatment system. This modification to the FF Retrofit Project exceeds minimum standards required for FF compliance.	07/31/02	\$500,000	The Petro 1 Wastewater Treatment System is designed to process 400 gpm of wastewater, a rate sufficient to process all of the wastewater generated by Petro 1 and Petro 2 combined. This design exceeds the minimum requirements of FF since the design could have been reduced to only process Petro 1 wastewater (approximately 150 gpm), or the system could have been designed to utilize the existing treatment system at Petro 2. The environmental benefit of this design is enhanced capabilities to handle upsets, turnarounds, maintenance activities, etc. with two redundant wastewater treatment systems. This more effective end-of-process treatment technology will result in lower TAPs emissions and thereby reduce pollution entering the environment during upsets, turnarounds and maintenance activities..
	TOTAL		\$4,408,000	

ATTACHMENT 3 - REMAINING ACTIONS

Revised: July 11, 2003

No.	Required Action	Target Completion Date	Status
1.	Conduct an evaluation of the impacts of becoming a major HAP source, including : a. A detailed evaluation of the applicability of HON requirements to each emission source. b. Submit an interim progress report to the LDEQ. c. Complete the installation of any necessary control and monitoring equipment.	a. 08/22/02 b. 02/22/03 c. 08/22/03	a. Complete b. Complete c. On schedule
2.	Develop Spill Prevention Control and Countermeasure (SPCC) Plans and Stormwater Pollution Prevention Plans and conduct required training for : Poly 1 / 2 units Styrene Marine Terminal Petro 1 / 2 units Styrene unit, Poly 3 unit a. Update SPCC plans. b. Complete training on updated plans	a. 12/31/02 b. 06/30/03	a. Complete b. On schedule
3.	a. Assess the management systems used to maintain the Poly 1 / 2, Petro 1 / 2, and Poly 3 wastewater and stormwater outfalls free of floating solids and visible foam. b. Implement non-capital corrective actions. c. Implement corrective actions requiring capital.	a. 07/31/02 b. 09/30/02 c. 12/31/04	a. Complete b. Complete c. PETRO 1&2 - 5/31/03 POLY III – 12/31/03 POLY 1&2 - 12/31/04
4.	Develop an inventory of Poly 1 / 2 critical environmental equipment and the preventative maintenance requirements for those pieces of equipment.	8/31/02	Complete
5.	a. Develop a BACT box for Styrene boiler no. 1 using data from the November-December 1999 and January 2000 reports. b. If the data above is not appropriate, then conduct another test.	a. 08/31/02 b. 12/31/02	a. Complete b. Complete
6.	Develop a boiler operating plan for Styrene Unit Boiler No. 2 that includes PEMS usage and shows how the equations were derived and the data used in the deviation, including - lb/hr steam, NOx ppm, and O2 percent.	12/31/02	Complete
7.	Develop an operating plan for Styrene unit storage tanks subject to NSPS Kb and Neshap Y.	08/31/03	On schedule
8.	Equip the Styrene Unit V-205 bottoms and Petro 1 / 2 (as required) with a closed-loop, closed-purge, or closed-vent system.	12/31/02	Complete
9.	Develop a car-seal management procedure for the Poly 3 unit.	11/30/02	Complete
10.	Update the Risk Management Plan (RMP) for Poly 3 Unit	08/31/02	Complete
11.	Develop and submit a Poly 3 Title V renewal application that adds the Poly 3 supersack additive loading system.	08/31/02	Complete
12.	Develop a Petro 1 / 2 Waste Minimization Plan.	10/31/02	Complete

ATTACHMENT 3 - REMAINING ACTIONS

Revised: July 11, 2003

No.	Required Action	Target Completion Date	Status
13.	Update the RCRA Contingency Plans and comply with the requirements for: Petro 1 / 2 units Poly 3 unit Styrene unit	09/30/02	Complete
14.	Include non-RQ releases in the annual TRI reports.	07/01/02	Complete
15.	Take action to ensure proper operation and emission control of the Petro 1 decoke drum so that it operates at conditions needed for proper emission controls.	12/31/03	Complete
16.	Develop an Air Pollution Episode Plan for Petro 1 / 2 units.	09/30/02	Complete
17.	Develop a monitoring plan for the Petro 2 Zimpro vent.	12/31/02	Complete
18.	Develop a system to properly document carbon canister change-outs.	08/31/02	Complete
19.	Conduct a PSD review for the Petrochemicals complex and submit appropriate permit applications, if needed.	10/31/02	Complete
20.	Develop and implement procedures to ensure that Petro 1, Petro 2, Poly 3, and Styrene Unit pH calibration solutions are properly labeled and dated.	06/30/02	Complete
21.	Develop and implement a management system to facilitate better waste tracking and management of associated documentation and waste activities throughout the complex.	06/30/02	Complete
22.	Submit a request to LDEQ to waive the flow meter requirement for certain Petro 1 and Petro 2 vent gas streams.	06/30/02	Complete

ATTACHMENT 4
LIST OF INTERIM OPERATING CONDITIONS

Revised: June 3, 2003

INTERIM EMISSION LIMITS

EMISSION POINT NUMBER	DESCRIPTION	PM10 TONS/YR INTERIM EMISSION LIMIT	NOx TONS/YR INTERIM EMISSION LIMIT	CO TONS/YR INTERIM EMISSION LIMIT	VOC TONS/YR INTERIM EMISSION LIMIT	NOTE
WESTLAKE POLYMERS LP (POLY 1&2) PERMIT NUMBER 0520-0127-06 (12/11/95); AI-9061						
55	POLY 1 Cooling Tower	11.4	NONE	NONE	3.7	1
86	POLY 2 Cooling Tower	17.0	NONE	NONE	5.5	1
88	Flare	NONE	9.0	49.1	21.9	2
WESTLAKE PETROCHEMICALS LP (PETRO 1&2) PERMIT NUMBER 0520-0145-V1 (12/23/99); AI-6164						
1-89A – 1-89F	Combined 6 Millisecond Furnaces (PETRO 1)	23.5	NONE	NONE	10.5	1
2-89	ZURN 1 Boiler	4.8	NONE	NONE	1.3	1
31-85	ZURN 2 Boiler	6.9	NONE	NONE	1.9	1
1-97	Furnace 7 (PETRO 1)	4.0	NONE	NONE	1.8	1
10-89	PETRO 1 Flare	NONE	20.3	78.7	20.5	2
WPT1-96 – WPT5-96	Combined 5 Furnaces (PETRO 2)	20.2	NONE	NONE	9.0	1
WPT8-96	PETRO 2 Cooling Tower	NONE	NONE	NONE	10.6	1
WPT11-96	PETRO 2 Flare	NONE	18.1	92.8	36.2	2
WESTLAKE STYRNE LP (STYRENE MONOMER FACILITY) PERMIT NUMBER 0520-0146-V0 (8/29/97); AI-18070						
5-90	Hotwell Vent Scrubber	NONE	NONE	NONE	4.9	2
25-90	Cooling Tower	1.9	NONE	NONE	1.3	1
BOILERS	CAP for 3-90 and 1-97	2.6	73.0	38.6	5.66	3
WESTLAKE PETROCHEMICALS LP (POLY III) PERMIT NUMBER 2461-V1 (6/29/01); AI-27518						
01-96	Low Pressure Flare	NONE	5.0	16.8	21.5	1, 2

NOTE 1: Change in emissions is a result of a change in the U.S. EPA AP-42 emission factor

NOTE 2: Change in emissions is a result of a better understanding of the source, which was under-represented in the original permitting for the facility.

NOTE 3: Change in emissions is a result of re-establishment of the basis for the emissions cap, which was moved to the two years immediately prior to construction.

NONE: Indicates either no expected emissions of that pollutant, or no change in authorized emissions for that pollutant.

ATTACHMENT 4
LIST OF INTERIM OPERATING CONDITIONS

Revised: June 3, 2003

INTERIM OPERATING CONDITIONS

EMISSION POINT NUMBER	DESCRIPTION	OXYGEN LEVEL % IN STACK EFFLUENT	OXYGEN LEVEL AVERAGING TIME	NO_x EMISSION RATE lb/MMBTU	NO_x EMISSION RATE AVERAGING TIME	NOTE
WESTLAKE PETROCHEMICALS LP (PETRO 1&2) PERMIT NUMBER 0520-0145-V1 (12/23/99); AI-6164						
1-89A – 1-89F	6 Millisecond Furnaces (PETRO 1)	2.0	30-DAY ROLLING AVERAGE	0.19	30-DAY ROLLING AVERAGE	1, 2
2-89	ZURN 1 Boiler	NONE	N/A	0.1	30-DAY ROLLING AVERAGE	1, 2
31-85	ZURN 2 Boiler	NONE	N/A	0.2	30-DAY ROLLING AVERAGE	1, 2
1-97	Furnace 7 (PETRO 1)	2.5	30-DAY ROLLING AVERAGE	0.16	30-DAY ROLLING AVERAGE	1, 2
WPT1-96 – WPT5-96	5 Furnaces (PETRO 2)	2.5	30-DAY ROLLING AVERAGE	0.159	30-DAY ROLLING AVERAGE	1, 2
WPT6-96 and WPT7-96	PETRO 2 Boilers	NONE	N/A	0.095	30-DAY ROLLING AVERAGE	1, 2

NOTE 1: Oxygen levels determined during Carbon Monoxide stack testing

NOTE 2: NO_x emission rates determined during stack testing and predictive emissions monitoring.

ATTACHMENT 5
LIST OF AIR PERMITS AND AIR PERMIT APPLICATIONS

Revised: July 11, 2003

PERMITS

PERMITS			
PRODUCTION UNIT	PERMIT NUMBER	ISSUE DATE	AGENCY INTEREST NUMBER
POLY 1&2	0520-00127-06	December 11, 1995	9061
PETRO 1&2	0520-00145-V1	December 23, 1999	6164
STYRENE UNIT	0520-00146-V0	August 29, 1997	18070
POLY III	2461-V1	June 29, 2001	27518
STYRENE MARINE TERMINAL	0520-00156-00	June 1, 1991	17904

APPLICATIONS

PENDING TITLE V AIR PERMIT APPLICATIONS			
PRODUCTION UNIT	WILL SUPERCEDE	SUBMITTAL DATE(S)	AGENCY INTEREST NUMBER
POLY 1&2	0520-00127-06	February 22, 2002	9061
PETRO 1&2	0520-00145-V1	September 12, 2001 November 1, 2002	6164
STYRENE UNIT	0520-00146-V0	February 22, 2002 August 22, 2002	18070
POLY III	2461-V1	October 23, 2001 January 16, 2003	27518
STYRENE MARINE TERMINAL	0520-00156-00	Scheduled May 2003	17904